

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An optical module ~~mating~~ to be mated with an optical connector that includes an optical fiber, comprising:

an optical sub-assembly having a head portion, said optical sub-assembly including an optical semiconductor device therein;

an optical receptacle having a cavity for receiving said optical connector and a space for receiving said optical sub-assembly, said optical receptacle having a groove with a front surface and a rear surface in an inner wall surface thereof, said rear surface being in direct contact with said flange of said optical sub-assembly; and

an elastic member disposed between said ~~optical receptacle~~ front surface of said groove and said flange of said optical sub-assembly,

wherein said elastic member enables said head portion of said optical sub-assembly to displace within said cavity.

2. (Cancelled)

3. (Currently Amended) The optical module according to claim 2 ~~1~~, further comprises a bracket disposed between said flange and said rear surface of said groove;

wherein said bracket aligns said optical sub-assembly with said optical receptacle, and said flange of said optical sub-assembly is in contact with said rear surface of said groove through said bracket.

4. (Original) The optical module according to claim 3, wherein said elastic member is an O-ring.

5. (Original) The optical module according to claim 3, wherein said elastic member comprises a ring portion and a plurality of limb portions extending from said ring portion to an inside thereof and warping from said ring portion, said plurality of limb portions being in contact with said front surface of said groove and said ring portion being in contact with said flange.

6. (Cancelled)

7. (Original) The optical module according to claim 6, wherein said elastic member is an O-ring.

8. (Original) The optical module according to claim 1, further includes a partition wall for dividing said cavity from said space, and said optical sub-assembly further includes a flange in an outer surface thereof,

wherein said head portion protrudes to said cavity by passing through said partitioning wall, and said elastic member is disposed between said partition wall and said flange.

9. (Original) The optical module according to claim 1,
wherein said optical sub-assembly further includes an sleeve and a coupling fiber optically coupled to said optical semiconductor device,
wherein said optical connector includes a ferrule securing said optical fiber therein, and

wherein said optical fiber secured in said optical connector is physically in contact with said coupling fiber when said ferrule of said optical connector 10 mates with said sleeve of said optical sub-assembly.

10. (New) An optical module to be mated with an optical connector that includes an optical fiber, comprising:

an optical sub-assembly having a head portion, and a groove with a front groove surface and a rear groove surface in an outer surface thereof, said optical sub-assembly including an optical semiconductor device therein;

an optical receptacle having a cavity for receiving said optical connector and a space for receiving said optical sub-assembly, said optical receptacle including a groove in an inner wall surface thereof;

a bracket disposed in said groove of said optical receptacle and being in contact with said front groove surface of said optical sub-assembly; and

an elastic member disposed between said rear groove surface of said optical subassembly and said bracket,

wherein said elastic member enables said head portion of said optical sub-assembly to displace within said cavity.